

What is claimed is

~~CLAIMS 090518~~

1. (Currently Amended) A freight management method, comprising
sensing a condition on a freight asset;
transmitting the information concerning the sensed condition over a wireless
system to a monitor system in one format;
in the monitor system translating the information concerning the sensed condition
from the one format into a second format;
transmitting the information concerning the sensed condition from the monitor
system in the second format to a user capable of receiving in the second format;
the step of sensing the condition on the freight asset includes monitoring the
sensed condition automatically and in real time;
the step of transmitting the information concerning the sensed condition to the
monitor system includes automatically responding to the condition in real time;
the step of translating the information concerning the sensed condition from the
first format to the second format including converting open system messages into existing
~~information system messages of the user in the form of~~ industry standard freight
messages;
~~the step of transmitting the information concerning the sensed condition from the~~
~~monitor system being in industry standard freight message format;~~
whereby said standard freight message provides immediate context for the user.

2. (Currently Amended) A freight management method as in claim 1, further
comprising

said freight asset being a first freight asset, said user being a first user, said
condition being a first condition;

automatically sensing a ~~plurality of conditions~~ second condition on a ~~plurality of assets~~ second freight asset associated with ~~respective ones of a plurality of users~~ a second user in real time;

automatically transmitting ~~the information concerning the~~ second sensed conditions condition over the wireless system to the monitor system in ~~one of a plurality of formats in real time~~ an open system message format;

translating the information concerning ~~the sensed~~ second conditions from respective open system messages into an industry standard freight message format;

transmitting the information concerning the second sensed condition from the monitor system to ~~respective ones of the plurality of users~~ all in the second format;

~~said step of transmitting the information concerning the sensed conditions over a wireless system to the monitor system in one~~ said second user the format includes responding to trigger conditions derived from user designated locations, destination areas, and freight operational settings and conditions on the asset;

~~the step of translating the information concerning the sensed conditions including converting open system messages into existing information system messages of the user in the form of industry standard freight messages;~~

said first and second freight asset together constituting a plurality of freight assets;
said first and second conditions constituting a plurality of conditions, and said first and second users constituting a plurality of users;

said step of transmitting the information concerning the plurality of sensed conditions over a wireless system to the monitor system includes responding to trigger conditions derived from one of user designated locations, destination areas, and freight operational settings and conditions on the plurality of freight assets.

3. (Currently Amended) A freight management method as in claim 2, further comprising:

~~in the monitor system comparing of the sensed conditions from the monitor system transmitting to said monitor system from the respective plurality of users industry standard freight messages of respective plurality of predetermined conditions for respective ones of said plurality of freight assets;~~

in the monitor system comparing of the information concerning the plurality of sensed conditions transmitted over the wireless system with respective ones of a plurality of predetermined conditions specified within standard freight shipment messages, to notify the plurality of users of respective disparities with the predetermined conditions and provide status updates in the standard freight shipment message of the plurality of users; and

automatically transmitting via the wireless system a respective change command ~~commands~~ to the actual condition on the ~~asset~~ plurality of freight assets to conform to the condition specified in the respective user's standard freight shipment message.

4. (Currently Amended) A freight management method as in claim 1, wherein:

~~the a~~ a translator in the monitor system compares information transmitted by a user predetermined conditions specified within industry standard freight message format with corresponding information concerning the condition transmitted via wireless communications from a remote monitoring device attached to a freight asset;

the specified information containing one of a user designated location, a commodity's pre-determined temperature set point setting, an arrival notification, a departure notification, attachment of auxiliary power equipment, in the format a user within the freight shipment documentation;

causing said translator to reconcile events derived from wireless communications directly in the format contained in the freight message of gps coordinates to a “named area or location” in a standard shipping document, thereby allowing a specific sensor reading to be directly applied through the entire monitoring, communication and network path to create notifications that the documented shipment condition is initiated, satisfied or terminated.

5. (Currently Amended) A freight management method as in claim 2, wherein:

~~Automatically~~automatically transmitting the information concerning the sensed ~~condition~~conditions over a wireless system to the monitor system by extracting relevant information from standard freight shipment messages and delivering predetermined conditions via the use of ~~the~~a translator.

6. (Currently Amended) A freight management method as in ~~claim 1~~ claim 2 wherein:

transmitting the information concerning the sensed ~~condition~~conditions over a wireless system to ~~a~~ the monitor system includes wireless notification transmissions events ~~in real-time~~ in real-time from a freight asset, based on pre-determined conditions identified in a standard freight message to the monitor, and, translating information and ~~the messages~~messages the transmission with a meaningful event to be used for tracking and monitoring of freight assets.

7. (Currently Amended) A freight management method as in claim ~~1~~2, wherein:

transmitting the information concerning the sensed condition over a wireless system to a monitor system includes wireless notification ~~transmissions~~transmission events in real-time in real-time from a freight asset, based on pre-determined conditions identified in a standard freight message, and, by transmission to and from ~~the~~a translator in the monitor system, associating the transmission with a meaningful event to be used for tracking and monitoring of a commodity transported in a freight shipment.

8. (Currently Amended) A freight management method as in claim 1, further comprising:

in said monitor system evaluating information about freight shipments, contained within standard freight messages, including one of terminal operations and intermodal ramp activities and related activities within the sensors,

from said plurality of freight assets automatically triggering and communicating in real time via a wireless system status notifications from entry of the sensor into an area governed by GPS coordinates on an intelligent device, pre-determined by designated locations in the users's systems, corresponding to the users' designated location, delivered in the second format to the user's freight system in real-time.

9. (Currently Amended) A freight management method as in ~~claim 1~~ claim 2, further comprising:

automatically transmitting specific information contained in standard freight messages ~~to the~~ to a translator in the monitor system and from the translator to automatically evaluate prescribed and pre-determined shipment conditions to actual shipment conditions communicated by wireless communications, including a prescribed temperature set point setting for a commodity identified in the standard freight messages of refrigerated transport equipment.

10. (Currently Amended) A freight management method as in ~~claim 1~~ claim 2, further comprising:

automatically comparing of weight of a load of a freight asset in one of the monitoring systems and the weight specified by a user by comparison ~~in the~~ in a translator in the monitor system.

11. (Previously Amended)Amended) A freight management method as in claim 1, further comprising:

evaluating messages initiated by a sensor at one of terminal operations and intermodal ramp activity, and freight asset location messages and related status messages, triggered by a change in a critical condition and transmitting to the translator and from the translator to allow immediate exception reporting in one of a monitoring system or a user system.

12. (Currently Amended) A freight management method as in ~~claim 1~~ claim 2, further comprising:

evaluating pre-determined ~~conditional~~ information concerning the plurality of conditions contained in standard freight messages, including one of bills of lading and waybills, to compare pre-determined shipment conditions, including a set point temperature of a commodity within a freight asset, and automatically sending commands to an intelligent device including the sensor on the freight asset to change the condition, including the set point temperature, to be compliant with the pre-determined condition in the standard freight message appropriate for a commodity on the freight asset;

sending a confirmation notification of a change in a condition at a sensor and confirmation of the actual change to said ~~translator~~ monitor system and transmitting the confirmation notification from the sensor as a standard freight status message in the format of the user's system to assure compliance to the ~~specified~~ predetermined condition.

13. (Previously Amended)Amended) A freight management method as in claim 1, further comprising:

transmitting a command to the translator and from the translator to a sensor to lock doors of freight asset when the asset has left a prescribed location contained in the standard freight message.

14. (Currently Amended) A freight management method as in claim 1, further comprising:

automatically initiating a shipment status message in standard shipment formats, using real-time information from a sensor by transmitting ~~to the~~ to a translator in the monitor system and from the translator wirelessly.

15. (Currently Amended) A freight management method as in claim 1, further comprising:

loading pre-determined conditions and trigger events ~~with the~~ with a translator in the monitor system onto a sensor on a freight asset, said conditions corresponding to the standard conditions transmitted to the translator and contained within standard freight messages, including designated locations, set point temperature and presence of auxiliary equipment.

16 (Currently Amended) A freight management method as in claim 1, further comprising:

triggering onto a sensor events which correspond terminal operations and intermodal ramp activity and related standard freight messages relevant status information, by transmitting the sensor events to ~~the~~ a translator in the monitor system and from the ~~translator~~ translator to the users of standard freight information trigger events and corresponding trigger events managed by a sensor.

17, (Currently Amended) A freight management method as in claim 2, further comprising:

establishing pre-determined conditions and trigger events on a fleet of freight assets associated with a user, and establishing other pre-determined conditions and trigger events on an entirely separate fleet associated with another user. on the basis of information in the standard freight shipment messages transmitted to ~~the~~ a translator in the monitor system and from the translator to the sensors, including one of lading, waybills, status messages, and location messages.

18. (Previously Amended)Amended) A freight management method as in claim 1, further comprising:

wireless intelligence including the sensor on a freight asset to evaluate status conditions that automatically trigger transmissions, and translating the status conditions into industry standard freight messages, the messages to include EDI and XML-based standard freight shipment messages, including but not limited to EDI 322.

19. (Previously Amended)Amended) A freight management method as in claim 1, further comprising:

mounting intelligent wireless devices and integrating the intelligent wireless devices mounted on freight assets with standard shipment messages communicating relevant shipment conditions in the same format via the translator.

20. (New) A system for managing freight, comprising:

a wireless monitor system having a data base;

a plurality of user two-way-communicating systems wirelessly coupled to said wireless monitor system;

a plurality of groups of two-way-communicating freight asset devices each wirelessly and automatically coupled to said wireless monitor system and each group automatically associated in said data base with one of said user systems on a real time basis;

said monitor system including a standard-freight-message to-and-from open-system-message translator coupled to the data base.